

We Claim:

1. A high strength, heat resistant alloy for exhaust valves with good overaging-resistance, which has an alloy composition essentially consisting of, by weight %, C: 0.01-0.2%, Si: up to 1.0%, Mn: up to 1.0%, P: up to 0.02%, S: up to 0.01%, Ni: 30-62%, Cr: 13-20%, W: 0.01-3.00%, Mo: up to 2.0%, provided that Mo+0.5W: 1.0-2.5%, Al: 0.7% or higher and less than 1.6%, Ti: 1.5-3.0%, Nb: 0.5-1.5%, B: 0.001-0.010%, provided that [%Ti]/[%Al]: 1.6 or more to less than 2.0, and the balance of Fe and inevitable impurities.

2. The heat resistant alloy for exhaust valves according to claim 1, wherein the alloy further contains at least one of the group consisting of Mg: 0.001-0.030%, Ca: 0.001-0.030% and Zr: 0.001-0.100%.

3. The heat resistant alloy for exhaust valves according to claim 1, wherein the alloy further contains Cu: up to 2.0%.

4. The heat resistant alloy for exhaust valves according to claim 1, wherein the alloy further contains V: 0.05-1.00%.

5. The heat resistant alloy for exhaust valves according to claim 1, wherein the alloy further contains Cu: up to 2.0% and V: 0.05-1.00%.

6. The heat resistant alloy for exhaust valves according to claim 2, wherein the alloy further contains Cu: up to 2.0%.

7. The heat resistant alloy for exhaust valves according to claim 2, wherein the alloy further contains V: 0.05-1.00.

8. The heat resistant alloy for exhaust valves according to claim 2, wherein the alloy further contains Cu: up to 2.0% and V: 0.05-1.00.

9. The heat resistant alloy for exhaust valves according to one of claims 1 to 8, wherein the alloy has a composition in which a portion of Ni is replaced with Co in an amount of up to 5% of the alloy.

10. The heat resistant alloy for exhaust valves according to one of claims 1 to 8, wherein the alloy has a composition in which whole or a portion of Nb is replaced with Ta.

11. The heat resistant alloy for exhaust valves according to one of claims 1 to 8, wherein the alloy has a composition in which a portion of Ni is replaced with Co in an amount of up to 5% of the alloy and whole or a portion of Nb is replaced with Ta.